# 1.3 High Altitude Balloon Operations

Research has shown that many high altitude balloons launched from Holloman AFB, N.M., were recovered in locations, and under circumstances, that strongly resemble those described by UFO proponents as the recovery of a "flying saucer" and "alien" crew. When these descriptions were carefully examined, it was clear that they bore more than just a resemblance to Air Force activities. It appears that some were actually distorted references to Air Force personnel and equipment engaged in scientific study through the use of high altitude balloons.

Since 1947, U.S. Air Force research organizations at Holloman AFB, N.M., have launched and recovered approximately 2,500 high altitude balloons. The Air Force organization that conducted most of these activities, the Holloman Balloon Branch, launched a wide range of sophisticated, and from most perspectives, odd looking equipment into the stratosphere above New Mexico. In fact, the *very first* high altitude data gathering balloon flight launched from Alamogordo Army Airfield (now Holloman AFB), N.M., on June 4, 1947, was found by the rancher and was the first of many unrelated events now collectively known as the "Roswell Incident."



Fig. 44. Inflation of a U.S. Air Force 626 ft. long, 34.6 million cu. ft. research balloon on August 13, 1972. This balloon was launched from Roswell Industrial Air Center (formerly Roswell AAF), Roswell, N.M., to test components of the NASA VIKING space probe. (photo by Ole Jorgeson)



## On the Threshold of Space

In 1956, Twentieth Century Fox released *On the Threshold of Space*, a full-length motion picture based on Air Force aero medical projects conducted at Holloman AFB, N.M. Starring Guy Madison, John Hodiak, and Dean Jagger, this drama chronicled the high altitude balloon experiments of projects High Dive/Excelsion and the high-speed track studies conducted by Col. John P. Stapp. Filmed on location at Holloman AFB, Air Force personnel, high altitude balloons, aircraft, vehicles, and other equipment, including the actual anthropomorphic dummies responsible for sightings of aliens, were used in the making of this film.

In an ironic twist, in 1990 the television program *Unsolved Mysteries*, featured a segment on the Roswell Incident. The program, hosted by actor Robert Stack, depicted a dramatized version of the claims of "aliens," space ships and mysterious government recovery crews. Interestingly, a review of newspapers from 1956 announcing the Hollywood premiere of *On the Threshold of Space*, listed Stack among the persons scheduled to attend this star-studded event.<sup>70</sup>

Fig. 45. Lobby card of the 1956 Twentieth Century Fox release, *On the Threshold of Space* starring Guy Madison (*seated*) and Martin Milner (*right*).





Fig. 46. Publicity photograph from *On the Threshold of Space* with (*from left*) Cameron Mitchell, Guy Madison and Dean Jagger. Scenes from the movie clearly depict the actual anthropomorphic dummies described nearly 40 years later as extraterrestrial "aliens."

Fig. 47. Col. J. P. Stapp's historic 1954 rocket sled test was re-created for *On the Threshold of Space (see figure 33, page 31)*.

## High Altitude Polyethylene Research Balloons

In 1946, as a result of research conducted for project Mogul, Charles B. Moore, a New York University graduate student working under contract for the U.S. Army Air Forces, made a significant technological discovery: the use of polyethylene for high altitude balloon construction.<sup>71</sup> Polyethylene is a lightweight plastic that can withstand stresses of a high altitude environment that differed drastically from, and greatly exceeded, the capabilities of standard rubber weather balloons used previously. Moore's discovery was a breakthrough in technology. For the first time, scientists were able to make detailed, sustained studies of the upper atmosphere. Polyethylene balloons, first produced in 1947 for Project Mogul, are still widely used today for a host of scientific applications.

High altitude polyethylene balloons and standard rubber weather balloons differ greatly in size, construction, and utility. The difference between these two types of balloons historically has been the subject of misunderstandings in that the term "weather balloon" is often used to describe both types of balloons.

High altitude polyethylene balloons are used to transport scientific payloads of several pounds to several tons to altitudes of nearly 200,000 feet. Polyethylene balloons do not increase in size and burst with increases in volume as they rise, as do standard rubber weather balloons. They are launched with excess capacity to accommodate the increase in volume. This characteristic of polyethylene balloons makes them substantially more stable than rubber weather balloons and capable of sustained constant level flight, a requirement for most scientific applications.

The initial polyethylene balloons had diameters of only seven feet and carried payloads of five pounds or less.<sup>72</sup> As balloon technology advanced, payload capacities and sizes of balloons increased. Modern polyethylene balloons, some as long as several football fields when on

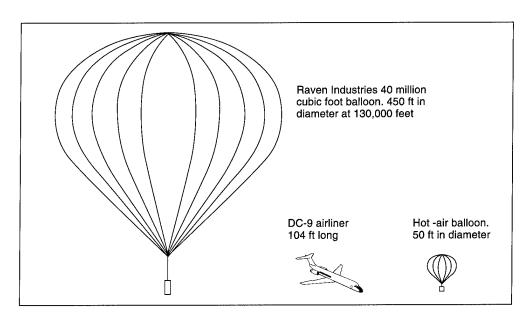


Fig. 48. Relative sizes of a modern high altitude poyethelyne research balloon, an airliner, and a hot-air balloon. Inaccurate characterizations of the giant high altitude research balloons as "weather balloons" (which are typically 15 feet in diameter) has historically been the source of confusion. (courtesy of Mike Smith, Raven Industries)

the ground, expand at altitude to volumes large enough to contain many jet airliners. Polyethylene balloons flown by the U.S. Air Force have reached altitudes of 170,000 feet and lifted payloads of 15,000 pounds.<sup>73</sup>

During the late 1940's and 1950's, a characteristic associated with the large, newly invented, polyethylene balloons, was that they were often misidentified as flying saucers. During this period, polyethylene balloons launched from Holloman AFB, generated flying saucer reports on nearly every flight. There were so many reports that police, broadcast radio, and newspaper accounts of these sightings were used by Holloman technicians to supplement early balloon tracking techniques. Balloons launched at Holloman AFB generated an especially high number of reports due to the excellent visibility in the New Mexico region. Also, the balloons, flown at altitudes of approximately 100,000 feet, were illuminated before the earth during the periods just after sunset and just before sunrise. In this instance, receiving sunlight before the earth, the plastic balloons appeared as large bright objects against a dark sky. Also, with the refractive and translucent qualities of polyethylene, the balloons appeared to change color, size, and shape.

The large balloons generated UFO reports based on their radar tracks.<sup>77</sup> This was due to large metallic payloads that weighed up to several tons and echoed radar returns not usually associated with balloons. In later years, balloons were equipped with altitude and position reporting transponders and strobe lights that greatly diminished the numbers of both visual and radar UFO sightings.

One classic misidentification of a Holloman balloon that was mistaken for a UFO, was launched on October 27, 1953.<sup>78</sup> According to the following account published in a widely distributed 1958 history of Air Force balloon operations, *Contributions of Balloon Operations to Research and Development at the Air Force Missile Development Center Holloman Air Force Base, N. Mex. 1947-1958*, a suspected Holloman balloon was tracked both visually and by radar over London, England on November 3, 1953.

"English accounts of the incident contained such statements as 'tremendous speed,' 'practically motionless,' 'circular or spherical and white in color,' 'emitting or reflecting a fierce light.' Altitude was reported as 61,000 feet—and as no research balloon had recently been sent up from Britain, there was ample room for local saucer enthusiasts to claim the 'unidentified flying object' as proof of their theories. A much likelier explanation, however, is that this was really the balloon launched from Holloman on 27 October."<sup>79</sup>

# High Altitude Balloon Payloads

Over the years, payloads transported by high altitude polyethylene balloons ranged from simple radio transmitters to anthropomorphic dummies to sophisticated satellite components and NASA interplanetary space probes. Many of these payloads, some of

which weighed many tons, were not what someone would typically envision as being associated with a balloon. Examples of payloads flown in New Mexico by Air Force high altitude balloons can be found on pages 52 and 53 at the end of this section.

Research projects of the late 1940's and 1950's conducted at Holloman AFB which began with the Project Mogul flights in June 1947, covered a wide spectrum of scientific research. One important experiment in space biology measured the effects of exposure to cosmic ray particles on living tissues. <sup>80</sup> Other projects gathered meteorological data and collected air samples to determine the composition of the atmosphere. <sup>81</sup> The first high altitude photographic reconnaissance project, a forerunner to today's reconnaissance satellites, Project 119L, also used high altitude balloons launched at Holloman AFB. <sup>82</sup>

As early as May 1948, polyethylene balloons coated or laminated with aluminum were flown from Holloman AFB and the surrounding area. Beginning in August 1955, large numbers of these balloons were flown as targets in the development of radar guided air to air missiles. Various accounts of the "Roswell Incident" often described thin, metal-like materials that when wadded into a ball, returned to their original shape. These accounts are consistent with the properties of polyethylene balloons laminated with aluminum. These balloons were typically launched from points west of the White Sands Proving Ground, floated over the range as targets, and descended in the areas northeast of White Sands Proving Ground where the "strange" materials were allegedly found.

In 1958 the first manned stratospheric balloon flights were made from Holloman AFB (see page 102). In 1960, balloon tests of components of the first U. S. reconnaissance satellite were also flown at Holloman AFB. In the 1960's, 70's, and 80's high altitude balloons were used in support of Air Force, and other U.S. Government and university sponsored research projects. Instrument testing of atmospheric entry vehicles for the National Aeronautics and Space Administration (NASA) space probes is one prominent example.



Fig. 49. Holloman Balloon Branch personnel prepare a polyethelyne balloon laminated with aluminum to serve as a target for radar guided missiles over White Sands Proving Ground, N.M. (U.S. Air Force photo)



## High Altitude Balloons and America's First Satellite

An illustration of the important contributions of the Holloman AFB Balloon Branch, and the necessity for a rapid recovery of a high altitude balloon payload, were evaluations of components of the first U.S. satellite-based reconnaissance system, code named CORONA.

The Soviet Union had already beaten the U.S. into space with the launch and orbit of Sputnik I on October 4, 1957. The next achievement in the quest for space superiority were the physical recovery of a payload that had been in orbit. The Discoverer satellite, the sensor used in the Corona program, was to be propelled into orbit and then eject a capsule containing an American flag to enable the U.S. to claim this honor. The space with the sensor used in the Corona program, was to be propelled into orbit and then eject a capsule containing an American flag to enable the U.S. to claim this honor.

The DISCOVERER program had been plagued by failure with 10 unsuccessful missions in 1959 and 1960. With the eyes of the nation watching, and the Soviets testing a similar system, more failures could not be tolerated. To test the faulty components of the DISCOVERER, U.S. Air Force high altitude balloons at Holloman AFB were determined to be the most expedient method of conducting the evaluations.

In April 1960, DISCOVERER XI, on the launch pad at Vandenberg AFB, Calif., was put into a hold pending results of the balloon tests. <sup>87</sup> The first test at Holloman AFB on April 5th was unsatisfactory due to a parachute failure. <sup>88</sup> On April 8th, with pressure mounting, the Balloon Branch launched another balloon with the DISCOVERER capsule. This test, in which the capsule was dropped over White Sands Missile Range and recovered immediately, was a total success. <sup>89</sup> The results were relayed by telephone from the Balloon Control Center at Holloman AFB to the launch pad at Vandenberg AFB where the countdown resumed. <sup>90</sup> Despite the successful balloon drop, DISCOVERER XI and DISCOVERER XII were failures. <sup>91</sup> Therefore, balloon testing continued throughout the summer of 1960.

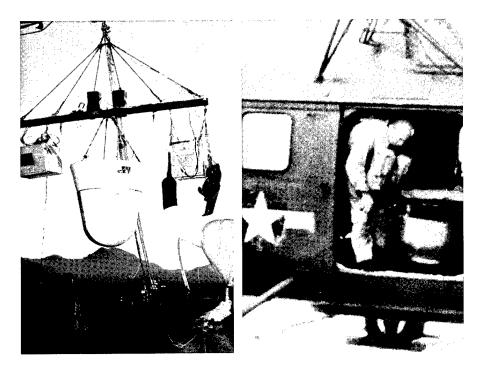


Fig. 50. (Left). A Holloman Balloon Branch launch crew prepares a nosecone of the DISCOVERER satellite for a high altitude balloon flight at Holloman AFB, N.M. in April 1960. (U.S. Air Force photo)

Fig. 51. (Right). A U.S. Navy helicopter aboard the USS Haiti Victory is shown here with the capsule from the DISCOVERER XIII satellite. It was recovered from the Pacific Ocean 330 miles northwest of Hawaii on August 11, 1960. (U.S. Air Force photo)

Finally, on August 11,1960, DISCOVERER XIII successfully ejected a capsule and, amid much fanfare, the first recovery of a manmade object that had orbited the earth was accomplished. <sup>92</sup> This first successful mission of an American satellite, made possible in part by Holloman AFB high altitude balloons, enabled the U.S. to beat the Soviets and claim the honor of the first space recovery by only nine days. <sup>93</sup>



The Surveyor (Moon), Voyager-Mars (Mars), Viking (Mars), Pioneer (Venus), and Galileo (Jupiter) spacecraft were tested by Air Force high altitude balloons before they were launched into space.

VIKING and VOYAGER-MARS Space Probes. Examples of unusual payloads, not likely to be associated with balloons, were qualification trials of NASA's VOYAGER-MARS and VIKING space probes. Both of these spacecraft looked remarkably similar to the classic domeshaped "flying saucer."

In 1966-67 and 1972, eight of the UFO lookalikes were launched by the Balloon Branch from the former Roswell Army Air Field (now Roswell Industrial Air Center), N.M.<sup>94</sup> The spacecraft were transported by Air Force balloons to altitudes above 100,000 feet and released for a period of self-propelled, supersonic, free-flight prior to landing on the White Sands Missile Range.<sup>95</sup> While the origins of the "Roswell" scenarios cannot be specifically traced to these vehicles, their flying saucer-like appearance, and the fact that they were launched exclusively from the original "Roswell Incident" location, leaves an impression that perhaps these odd balloon payloads may have played some role in the unclear and distorted stories of at least some of the "Roswell" witnesses.

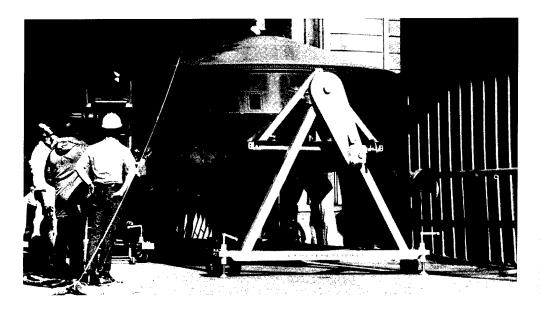
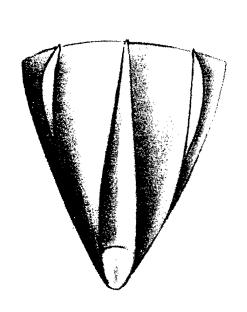


Fig. 52. A NASA VIKING space probe is rolled out of its assembly building at Martin Marietta Corporation in Denver, Colo. (NASA)



**Tethered Balloons**. The Holloman Balloon Branch, in addition to high altitude research activities, also conducted low altitude tethered balloon flights. It appears that descriptions of these balloons may have become part of the "Roswell Incident."

Most standard shaped tethered balloons are readily identified when near the ground or when the tether is visible. Other experimental tethered balloons are not so easily identified. During the 1960s, Balloon Branch personnel flew experimentally shaped tethered balloons from deep canyons of central New Mexico. To a distant observer, from a vantage point above the canyon rim, where the tether and ground anchors are not visible, an experimental tethered balloon might lead some persons to speculate as to the oddly shaped balloon's origin and purpose. One design of a low altitude tethered balloon may have inspired at least one account of an "alien" craft. In *The Truth About the UFO Crash at Roswell*, the authors published a drawing of a crashed alien spaceship allegedly based on a drawing given to them by an anonymous witness. <sup>96</sup> When this drawing is compared to a photograph of an experimental tethered balloon flown at Holloman AFB in March 1965, the similarities are undeniable. <sup>97</sup> The tethered balloon and the NASA space probes are just two examples of the uncommon technologies that were flown in New Mexico by the Holloman Balloon Branch.



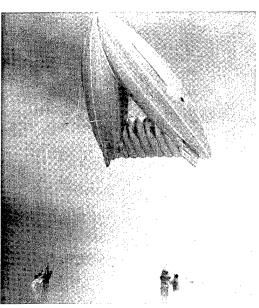


Fig. 56. (Left) A drawing from a popular UFO book, The Truth About the UFO Crash at Roswell, depicts an alien spacecraft allegedly drawn by an anonymous witness. (The Truth About the UFO Crash at Roswell)

Fig. 57. (Right) A tethered "Vee" balloon shown here at Holloman AFB, N.M. in March 1965. This experimental balloon, is strikingly similar to the "alien" craft. (U.S. Air Force photo)

Today, the Air Force maintains a reduced but still highly capable high altitude balloon program at Holloman AFB. The Space and Missile Command, Test and Evaluation Unit (SMC/TE, OL-AC) represents the sole Department of Defense high altitude research balloon capability. The ability of a U.S. Air Force high altitude balloon to lift a scientific payload to more than 100,000 feet, above 99 per cent of the earth's atmosphere, for days at a time, presents a profoundly useful scientific tool at a fraction of the cost of a space research platform. Recent tests that utilized Holloman balloons included atmospheric sampling and gravity measurement experiments, high altitude astronomic studies, weapons systems evaluations, and gamma ray detection experiments. While most tests continue to be launched from the permanent

balloon launch facility at Holloman AFB, U.S. Air Force balloon crews have recently launched balloons from numerous field locations in the U.S. (including two sites in Roswell), as well as Alaska, Panama, and Antarctica.

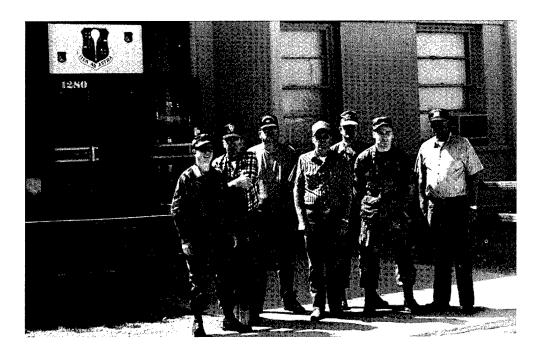


Fig. 58. Present members of the Holloman Balloon Branch in front of the Balloon Operations Center, Building 850, at Holloman AFB, N.M., (from left) TSgt. Roger J. Welch, Mr. Joseph Fumerola, Mr. Alvin W. Hodges, Mr. Joseph Longshore, MSgt. Ray A. Pitts, Sr. Amn. John Witkop, and Mr. Harvey L. Harris. (U.S. Air Force photo)

## Balloon and Payload Recoveries

UFO theorists support their claims of an extraordinary occurrence in the New Mexico desert by describing mysterious U.S. military personnel, operating a variety of vehicles and aircraft that always seem to arrive shortly after the crash of a "flying saucer." When carefully scrutinized, the descriptions of the mystery crews, their equipment, methods, and the areas where the recoveries allegedly occurred—in targeted high altitude balloon recovery areas—indicates that Holloman Balloon Branch activities were most likely responsible for the claims.

To successfully recover high altitude balloons, balloon recovery technicians regularly ventured far from Holloman AFB. In most instances the balloons and their scientific payloads were recovered from predetermined recovery areas. These regularly targeted areas, located in Arizona, West Texas, and New Mexico, included the area surrounding Roswell.<sup>98</sup> From 1947 to the present, the Roswell area has been the site of hundreds of balloon and payload recoveries (including those that carried anthropomorphic dummies).<sup>99</sup>

The regularly targeted areas were the result of the evolution of high altitude balloon control techniques developed at Holloman AFB. These techniques were based on meteorological, geographical, and operational conditions that exist in New Mexico. These factors, combined with ample amounts of skill and experience of balloon controllers at Holloman AFB, determined the impact points of Holloman high altitude balloons.

Many of the procedures used to position Air Force balloons are described in *General Philosophy and Techniques of Balloon Control*, and *Meteorological Aspects of Constant-Level Balloon Operations in the Southwestern United States*, both by Bernard D. Gildenberg (see statement in Appendix B). Gildenberg served as the Holloman Balloon Branch Meteorologist, Engineer, and Physical Science Administrator from 1951 until 1981. During this period, Gildenberg, a recognized world expert in upper atmospheric wind patterns, pioneered methods to launch, control, track, and recover high altitude balloons. Many of these methods are still used today by the U.S. Air Force and by research organizations throughout the world.

# Interaction with Civilians

In several accounts, unsubstantiated allegations have been made that military personnel who retrieved equipment from rural areas of New Mexico intimidated and threatened civilians. Contrary to these charges, Balloon Branch personnel enjoyed good relations with the local community and often solicited their assistance in the area of a balloon or payload



Fig. 59. Bernard D. "Duke" Gildenberg (center) Balloon Branch Meteorologist, is shown here in May 1957 in front of the Man High I gondola. With Gildenberg are Man High I pilot Capt. Joseph W. Kittinger, Jr. (left), and MAN HIGH project scientist/pilot, Lt. Col. David G. Simons (MC). When Gildenberg attempted to inform UFO theorists that high altitude balloon projects were likely responsible for some of the UFO claims, his explanations were rejected, see also pages 8 & 9. (U.S. Air Force photo)

landing. In the flat, featureless desert areas of southeastern New Mexico near Roswell, the parachutes, payloads, the balloons themselves, and circling chase aircraft often drew crowds of curious onlookers from the local community. In fact, so many civilians were often present at balloon or payload landing sites, the scene was described by longtime civilian Balloon Branch recovery supervisor, Robert Blankenship, as being like the "circus coming to town." <sup>101</sup>

Allegations that civilians were threatened or told to "forget what they saw" are profoundly inaccurate. Threats, intimidation, or other types of misconduct by Balloon Branch personnel would have served no purpose since without the cooperation of local persons, many recoveries would not have been possible. 102

Most balloon recoveries were coordinated in advance with local law enforcement agencies. <sup>103</sup> If a balloon or payload landed on private property and the owner could not be located, Balloon Branch operating instructions dictated that the local sheriff or police must be contacted. <sup>104</sup> In situations where local persons arrived at balloon landing sites before the recovery crews, they were simply asked to "step back" to allow recovery personnel to secure the balloon equipment. <sup>105</sup> If these persons inquired as to the purpose of a balloon flight, they were informed by technicians that it was a U.S. Air Force scientific study and were given a telephone number at Holloman AFB if they required additional information. At Holloman AFB, individuals qualified to answer detailed questions responded to these



Fig. 60. (Right) This ranch family assisted in the recovery of a Project STARGAZER high altitude balloon payload and is shown here with a panel from the unmanned gondola. (U.S. Air Force photo)

inquiries. There was never a reason to mislead or threaten individuals who observed balloon operations. Relations with local citizens were good, and Balloon Branch personnel and equipment were a common sight to residents in areas with high incidences of balloon operations.

In a few instances, situations arose when persons not familiar with the procedures and equipment used by the Balloon Branch misunderstood their activities. Such misunderstandings occurred several times during the 1970s and 1980s when recovery crews not only attracted the attention of local citizens while coordinating balloon recoveries, but also drew the attention of federal law enforcement agencies. 106

Checks with the local sheriff revealed that the trucks and circling aircraft in the desert near Roswell were part of a balloon recovery mission, and not a drug smuggling operation. Apparently, balloon recoveries appeared to be something suspicious even to federal agents.



Fig. 61. A typical Holloman Balloon Branch recovery crew is shown here with a man known as "The hermit" who assisted them in a balloon recovery northwest of Silver City, N.M. in the 1960s. (photo collection of Robert Blankenship)



Fig. 62. A mule (named Ida) was borrowed from a local rancher when a balloon payload landed in difficult terrain 20 miles north of Wickenburg, Ariz. in October 1966. (U.S. Air Force photo)



Fig. 63. On occasion, Air Force balloon recovery crews rented or borrowed equipment from local residents. This bulldozer was rented for one recovery in the Sacramento mountains west of Roswell. (photo collection of Robert Blankenship)

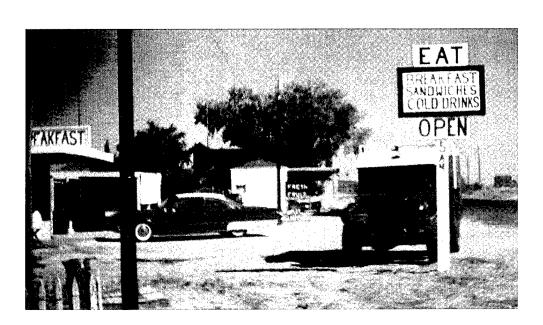
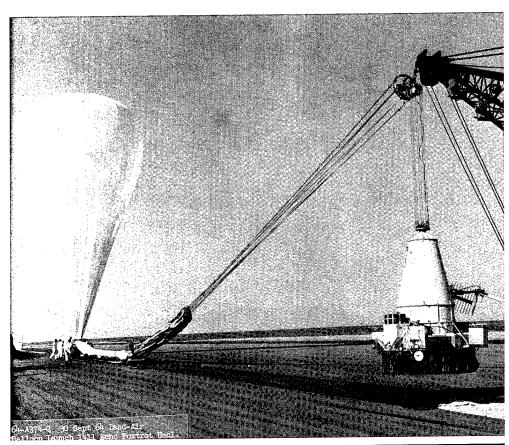


Fig. 64. Balloon Branch vehicle at roadside café. This M-43 3/4-ton field ambulance, converted by the Holloman Balloon Branch into a communications vehicle, was a common sight in the areas surrounding Roswell during the 1950s and early 1960s. (photo collection of Ole Jorgeson)

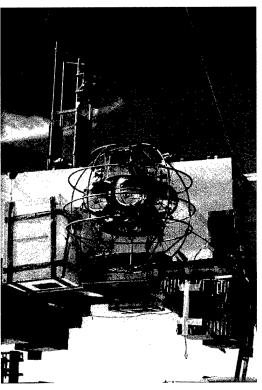


Figs. 65 & 66. Examples of unusual payloads flown by Air Force high altitude balloons at Holloman AFB, N.M. (U.S. Air Force photos)



Fig. 67. (Left) This U.S. Army communications payload was flown at Holloman AFB, N.M. on September 30, 1976. (U.S. Army photo)

Fig. 68. (Right) Payload launched by an Air Force high altitude balloon from Holloman AFB, N. M. on March 20, 1965. This payload was a scientific experiment for The John Hopkins University Astrophysics Laboratory. (U.S. Air Force photo)





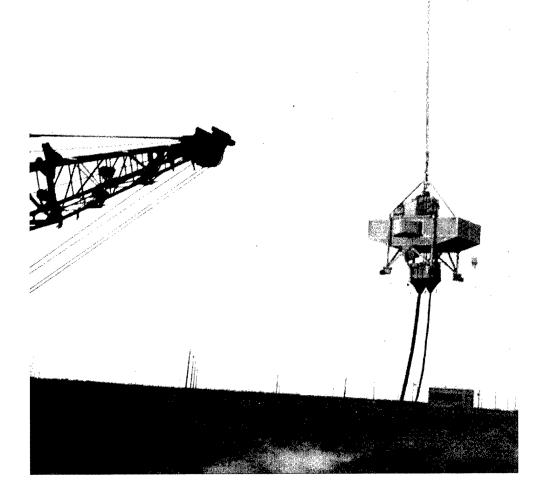


Fig. 69. High altitude balloon payload launched from Holloman AFB on September 14, 1976. (U.S. Air Force photo)

# 1.4

# Comparison of Witnesses Accounts to U.S. Air Force Activities

Were they aliens or dummies? This question can be answered by comparing witness testimony and the Air Force projects of the 1950s, High DIVE and EXCELSIOR. Both of these projects employed anthropomorphic dummies flown by high altitude balloons and appeared to satisfy the requirements of the previously established research profile:

- a. An activity that if viewed from a distance would appear unusual.
- **b.** An activity for which the exact date was not likely to have been known because many dummies were dropped over a six-year period (1953-1959).
- c. An activity that took place in many areas of rural New Mexico.
- **d.** An activity that involved a type of aerial vehicle with dummies that had four fingers, were bald and wore one-piece gray suits.
- e. An activity that required recovery by numerous military personnel and an assortment of vehicles that included a wrecker, a six-by-six, and a weapons carrier.

The testimony used in the following comparison, an undocumented mixture of firsthand and secondhand re-countings, are the actual statements, not the interpretations of UFO proponents, that are presented to "prove" the Earth was visited by extraterrestrial beings and the U.S. Air Force has covered up this fact since 1947. This comparison is augmented by references to photographs whenever possible to illustrate the undeniable similarities between the descriptions provided by the witnesses and the equipment and methods employed by the Air Force projects.

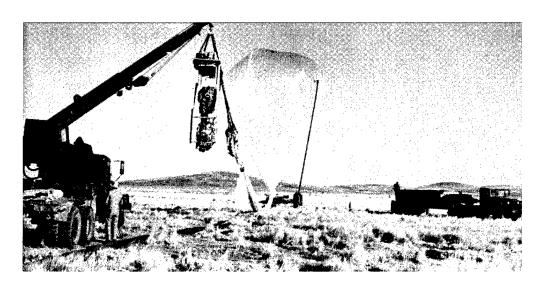


Fig. 70. Project High Dive anthropomorphic dummy launch. (U.S. Air Force photo)

# "Crash" Site 1

## (Allegedly North of Roswell)

This summarized account is the basis for the alleged "flying saucer" crash site north of Roswell.\* The exact location is not known since the witness, Mr. James Ragsdale, in two separate sworn statements, has described two different sites, many miles apart. This account was excerpted from an interview with Mr. Ragsdale by author Donald Schmitt. A transcript of the complete interview is included in Appendix C.

#### The Account

#### James Ragsdale

"They was using dummies in those damned things" 108

Testimony attributed to Ragsdale, who is deceased, states that he and a friend were camping one evening and saw something fall from the sky. The next morning, when they went to investigate, they saw a crash site:

"One part [of the craft] was kind of buried in the ground and one part of it was sticking our [out] of the ground." "I'm sure that [there] was bodies... either bodies or dummies." "The federal government could have been doing something they didn't want anyone to know what this was. They was using dummies in those damned things...they could use remote control...but it was either dummies or bodies or something laying there. They looked like bodies. They were not very long... [not] over four or five foot long at the most." "We didn't see their faces or nothing like that... we had just gotten to the site and the Army...and all [was] coming and we got into a damned jeep and took off."

This testimony then describes an assortment of military vehicles used to recover the "bodies": "It was two or three six-by-six Army trucks a wrecker and everything. Leading the pack was a '47 Ford car with guys in it... It was six or eight big trucks besides the pickup, weapons carriers and stuff like that." Ragsdale also said that before he left the area he observed the military personnel "gathering stuff up" and "they cleaned everything all up."

#### **Assessment**

In his testimony, Ragsdale made numerous references to equipment, vehicles, and procedures consistent with documented anthropomorphic dummy recoveries for projects High Dive and Excelsior. The repeated use of the term "dummy" and the witness' own admission that "they was using dummies in those damned things" and "I'm sure that was bodies...either bodies or dummies"

<sup>\*</sup> In The Truth About the UFO Crash at Roswell (Avon Books, 1994, p. 131), the authors provided a corroborating account for this testimony from a 96-year-old man who was in ill health, whose interview was not tape recorded, and has since died. According to the book, the man's "wife and daughter said that he was easily confused" and "memories of his life were jumbled and reordered."

leaves little doubt that what he described was an anthropomorphic dummy recovery.

Based on testimony attributed to this witness, the confusion could have resulted from the fact that he observed these activities from a distance. If the witness was even a short distance from the odd looking anthropomorphic dummies, it would be logical for him to believe, when interviewed 35 to 40 years after the event, that he "thought they were dummies or bodies or something." Also, for some of the high altitude drops, the dummies did not separate from the suspension rack and "rode the rack" to the ground without deployment of a parachute. <sup>109</sup> If the parachutes of the dummies or parachutes of the rack assembly did not deploy (a common occurrence during the early dummy drops), then they free-fell from up to 98,000 feet. As a result of these malfunctions, the arms and legs of the dummies were often separated from the body on impact. This may account for the witness' description of bodies [not] "over four or five foot" tall.

Another portion of his testimony suggesting that the witness observed an Air Force high altitude balloon and dummy recovery was the statement: "The federal government could have been doing something because they didn't want anyone to know what this was...they was using dummies in those damned things...they could use remote control." Balloon controllers used remote control to relay commands to the balloon control package to valve gas and drop ballast. The dummies themselves were also dropped from the suspension rack by remote control.

The witness also described a Balloon Branch procedure that required the area of a balloon or payload landing to be restored to its original condition. It was evident in the statements "They cleaned everything all up" and "They began gathering the stuff up." Thoroughly cleaning a balloon or dummy landing site and removing any debris

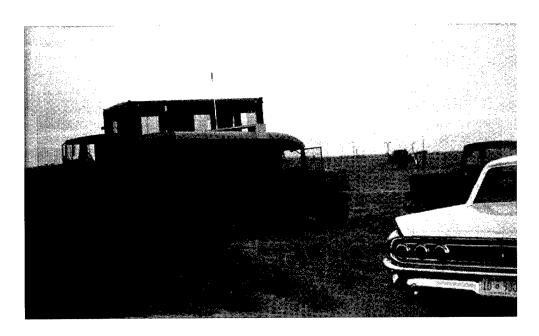


Fig. 71. Numerous vehicles and various types of equipment, were often present at high altitude balloon and anthropomorphic dummy launch and recovery locations. (photo collection of Ole Jorgeson)

deposited there was a standard procedure to maintain good community relations and avoid legal claims that could arise over property damages or livestock losses. <sup>114</sup> Cattle were known to ingest scraps of polyethylene balloon material that sometimes littered entire fields following a balloon failure or flight termination. <sup>115</sup>

The military vehicles described were also consistent with recovery and communications vehicles used during the 1950s to retrieve anthropomorphic dummies and suspension racks. <sup>116</sup> The witness stated he saw a "wrecker," a "six-by-six," a "weapons carrier," a "'47 Ford car," and a "pickup." The "wrecker" was most likely a M-342 5-ton wrecker that was assigned to the Balloon Branch for launch and recovery operations. <sup>117</sup> Other vehicles described were also the type used to launch and recover anthropomorphic dummies. The "six-by-six" is a likely reference to a M-35 2 1/2-ton cargo truck; "weapons carriers" were the common name of a Dodge M-37 3/4-ton utility truck. References to "the pickup" and a "'47 Ford car," were likely descriptions of other civilian and military vehicles often present at high altitude balloon launch and recovery locations.

# "Crash" Site 2

### (Allegedly 175 miles Northwest of Roswell)

This purported flying saucer "crash" site is allegedly 175 miles northwest of Roswell in an area of New Mexico known as the San Agustin Plains. The contention that a flying saucer crashed at this location and was recovered by the U.S. military is supported by three principal testimonies, two secondhand and one firsthand.

## The Secondhand Accounts

These accounts were related by Mr. Vern Maltais and Ms. Alice Knight, who were acquainted with the alleged original eyewitness, Mr. Grady L. Barnett, who is deceased. Unless otherwise noted, the following statements appeared on footage used to prepare a video, *Recollections of Roswell Part II*, by the The Fund for UFO Research (see Appendix C).

#### Alice Knight

"I don't recall the date" 119

"I don't remember whether it was before my husband and I were married or after, I don't recall the date. But he [the eyewitness] saw a UFO fall...and he got nearly to the site...but they got nearly up to the UFO but it was close enough that you could see some creatures. He said they didn't look like human beings out there. And along came government cars and trucks. I guess it was government. You know it was a long time ago...and they told him to go on back and forget that they ever saw anything, and that's all I recall."

#### Assessment

This brief testimony suggests that the witness did not know the date of this event. It also appears that the "creatures" were seen from a distance, as evidenced by the statement, "They got nearly up to the UFO but it was close enough that you could see some creatures." The testimony also seems consistent with a description of anthropomorphic dummies as the witness stated they "didn't look like human beings."

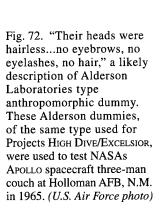
#### **Vern Maltais**

"Their heads were hairless...no eyebrows, no eyelashes, no hair" 120

This secondhand witness alleged that the eyewitness told him he observed "beings" from a "flying saucer that had burst open" that were "about three and a half to four feet tall, very slim...their heads were hairless, with no eyebrows, no eyelashes, no hair" with "sort of a pear-shaped head." He also related that "the beings were...not exactly like human beings...similar but not exactly." He described that the hands of the beings "were not covered"...and [they] only had "four fingers." He also related that the clothing of the beings was "one-piece and gray in color" The witness concluded that "As they [the witnesses] were just starting to look things over really closely, the military moved in and gave them a briefing to not say anything about it."

#### Assessment

This description of events also indicates that the eyewitness apparently did not closely examine the scene and was "just starting to look things over" when the military arrived. As with the previous testimony, from a distance the dummies were likely to look, as described by the witness, "not exactly like humans...similar but not exactly." The description of the flying saucer that had "burst open" is a likely description of the dummy suspension rack that was open on the sides (see figures 74, 75, 76). The detailed descriptions of the "beings" as "about three and a half to four feet tall, very slim in stature...their heads were hairless, with no eyebrows, no eyelashes,





no hair," with "hands that were not covered" and "had only four fingers," is a likely description of an Alderson Research Laboratories model anthropomorphic dummy. The head of the Alderson dummy was "bald" and the area of the eyebrows protruded but had no "hair" (see figure 72). Also, a distinguishing feature of the Alderson dummy, unlike the Sierra dummy, was that it had individual fingers not covered by gloves that were often damaged during the tests resulting in the loss of fingers (see figures 35, 73, 75).

Due to the secondhand nature of these accounts, even UFO theorists were not convinced that this "incident" actually occurred. Corroborating testimony of a firsthand witness was necessary to verify these claims. The firsthand testimony is examined next.

#### The Firsthand Account

This testimony became part of the Roswell Incident in 1990 following an episode of the television program *Unsolved Mysteries*. <sup>122</sup> Following a dramatized re-creation on the program, persons with information concerning this event were encouraged to call a special toll free telephone number.

From the outset, some UFO theorists were skeptical of this testimony due to the amount of detail provided from the witness who was only five years old in 1947. In fact, UFO organizations sponsored a conference in February 1992 to evaluate the testimony for authenticity. The witness was asked to take a polygraph examination, which he passed. Many UFO enthusiasts remained skeptical of the claims and denounced this testimony as "no more than a fabrication."

Unless otherwise noted, two sources of testimony attributed to the witness have been used in this examination; interviews used to prepare the video *Recollections of Roswell Part II* by the Fund for UFO Research (see Appendix C) and *Crash at Corona* by Don Berliner and Stanton Friedman (passages from this book were used only when exact quotations of the witness were indicated).

#### Gerald Anderson

"I thought they were plastic dolls...I didn't think they were real" 126

Anderson related that as a five-year-old boy on an outing with his family in west central New Mexico, they stumbled upon the crash of some type of aerial vehicle. When he first saw the craft he thought it was a "blimp." According to Anderson he "didn't really get very close," but thought he saw four bandaged crewmembers and at first he "thought they were plastic dolls." He also described attempts by persons in his party to communicate with one of the "crewmembers." Soon after, other civilians arrived (some wearing pith helmets) followed by military personnel in an assortment of vehicles and aircraft commanded by a "redheaded captain." The military personnel, after "screaming and hollering" at the civilians "this is a military secret,"

started a recovery operation of the alien craft and crew.<sup>133</sup> Anderson also recalled that the military personnel threatened some of the civilians with imprisonment or death before escorting them out of the area.<sup>134</sup>

#### Assessment

Anderson's choice of the terms "blimp" to describe the crashed vehicle, and "dolls" to describe the "crew," strongly suggests that a balloon with an anthropomorphic dummy payload was the foundation for this testimony. He also provided an abundance of supporting details that accurately described vehicles, aircraft, equipment, and procedures used by the Holloman AFB Balloon Branch to launch and recover anthropomorphic dummies.

An aspect of this testimony that is not accurate is the alleged threats and intimidation of civilians by military personnel. The use of such heavy-handedness was not a tactic used by the Air Force. A careful review of official records and interviews with numerous persons who actively participated in and were responsible for the conduct of Air Force members on high altitude balloon recovery operations revealed that these allegations are untrue. 135 Additionally, the witness alleges that the military personnel were "screaming and hollering" "this is a military secret." This statement might lead uninitiated persons to believe that the witness observed something highly classified and that by telling everyone present that it was a "military secret" would somehow help it to remain so. However, logic dictates that if something was classified "screaming and hollering" it was "secret," would compromise it and not serve to protect its classification. This application of logic, combined with the fact that the launch and recovery of anthropomorphic dummies was unclassified, widely publicized, and often observed by local civilians, indicates that the witness' recollections are in error. There was never a reason to disrespect, "scream," "holler," or forbid any person from talking about the launch or recovery of anthropomorphic dummies.

The "Crewmembers." The statement "I thought they were plastic dolls" seems an odd choice of words to describe an extraterrestrial being and is a likely reference to an anthropomorphic dummy whose skin was made of plastic.<sup>137</sup> This description is similar to that of the sole witness of the other crash site, north of Roswell, who described the "aliens" as "dummies." Other references provided by this witness further indicate that anthropomorphic dummies were the basis for these descriptions. The heads of the "crewmembers" were described as "completely bald" with "no visible ears...just a rise...and then a hole."139 This is an accurate description of Alderson Research Laboratories model dummies that did not have "hair" and had either plastic "ears" molded to the head or a circular opening where a "demountable ear" or additional instrumentation was attached (see figure 22).140 The statement "they didn't have a little finger,"141 a detail very similar to one provided by another witness, also appears to be a description of dummies manufactured by Alderson Laboratories that were often damaged during the balloon tests resulting in the loss of fingers.

The assertion that "they were all wearing one-piece suits...a shiny silverish-gray color," "trimmed in ...maroon-like cording" is a likely reference

to a standard issue, gray, Air Force flightsuit used to outfit the dummies and red duct-type tape used in the tests that prevented air from filling the flightsuit (see fig. 30). The recollection that "crewmembers" had "bandages" on their bodies were likely references to tape and nylon webbing used to prevent flailing

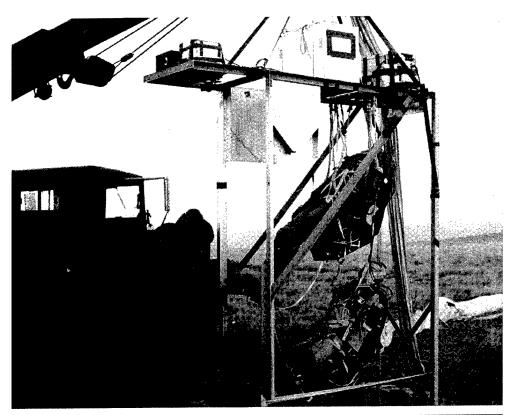


Fig. 73. "Some kind of container, a metal box," was described as laying on the ground near the alleged aliens. This appears to be a reference to boxes containing electrical components of the remote controlled systems positioned on the top of the dummy suspension rack. (U.S. Air Force photo)

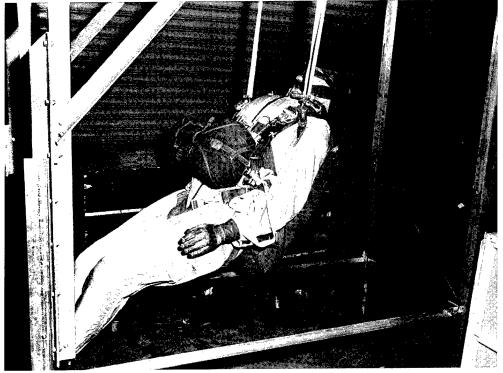


Fig. 74. "They looked like they had some sort of bandages on 'em...over his... arm... around his midsection and partially over his shoulder"—witness description of tape and nylon webbing used to prevent arms and legs from flailing, and parachute harness that had chest and shoulder straps. Tape was also used to secure the removable back plate of the head (also see figs. 29, 30, 73,75). (U.S. Air Force photo)

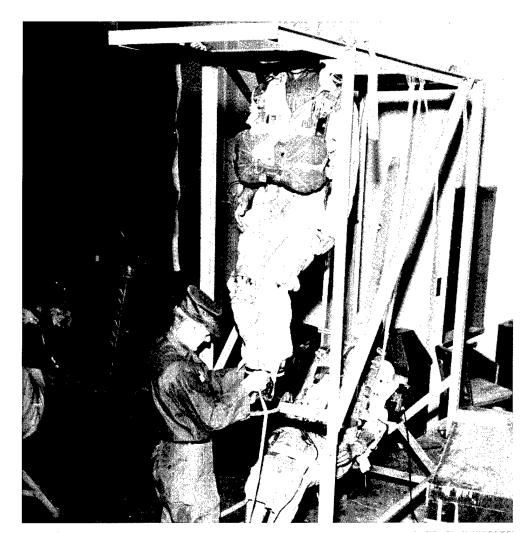


Fig. 75. "It's uniform was torn in a couple spots...their uniforms were in pretty sad shape"—witnesses description of secondhand flightsuits that were used repeatedly on tests; tears and other damage were common. In this photo, 1st Lt. Raymond A. Madson "rigs" a dummy to its suspension rack for project High Dive at Holloman AFB, N.M. (U.S. Air Force photo)



Fig. 76. A witness described at least one person at a "crash" site wearing a pith helmet. In the 1950s, the pith helmet was part of the Air Force uniform and was often worn on balloon launches and recoveries. In this publicity photo from *On the Threshold of Space*, Air Force members at Holloman AFB who were extras in the film can be seen wearing pith helmets. (also see figure 49)

of a dummy's arms and legs during tests.<sup>145</sup> A reference to a bandage "around his [the crewmember's] midsection and partially over his shoulder"<sup>146</sup> is a likely reference to the standard B-4 or B-5 parachute with chest and shoulder straps worn by the dummies.<sup>147</sup>

The "Craft." In what appears to be a clear reference to a balloon, was that when he saw the crashed vehicle he "thought it was a blimp." Additional descriptions of cables that "went from one kind of a package of components to another kind of package" and a "metal box" were likely references to the balloon control package that was positioned on top of the dummy suspension rack. A further reference to a balloon payload is the statement that on a hot New Mexico day the crashed vehicle was "ice cold, it felt like it just came out of the freezer." This accurately describes a physical condition known as "cold soaking" common to high altitude payloads that had recently been exposed to sub-zero temperatures of the upper atmosphere.

**Military Aircraft.** The witness also described two aircraft of the same type used for anthropomorphic dummy recoveries as having been involved in the activity he witnessed. One aircraft was described as a "C-47" and another as an "observation aircraft...a high-winged aircraft."<sup>151</sup> These were a C-47 and a L-20 aircraft used extensively by the Balloon Branch during the mid 1950s for tracking and recovering anthropomorphic dummy



Fig. 77. "An observation aircraft...a high-winged aircraft"—a witness's probable reference to a U.S. Air Force L-20 aircraft used extensively by Holloman AFB crews to track and recover anthropomorphic dummies. (U.S. Air Force photo)



Fig. 78. Described as present at a flying saucer "crash" site was a C-47 aircraft. This is a probable reference to a U.S. Air Force C-47 transport aircraft used to move equipment to launch sites distant from Holloman AFB. These aircraft were also used for aerial tracking of high altitude balloon flights including those that flew anthropomorphic dummies. (U.S. Air Force photo)

balloon flights.<sup>152</sup> This testimony also described aircraft that were typically overhead during a recovery and an established procedure of landing on a rural road or in a field to reach isolated balloon launch or recovery locations.<sup>153</sup>

**Military Vehicles.** Numerous military vehicles, several of which were described by other witnesses as having been at the other crash site north of Roswell, were also described. Witnesses at the two different sites described a "wrecker" and a "six-by-six," both of the type used for anthropomorphic dummy recoveries.<sup>154</sup> The account also described two vehicles unique to the Balloon Branch that were used for the majority of high altitude balloon recoveries during the mid-to late-1950s.

The witness described a "jeep-like truck that had a bunch of radios in it"...There was a guy sittin' in there wearin' earphones and he was talking on the radio."155 This is a likely description of a Dodge M-37 3/4-ton utility truck, known as a weapons carrier, that had been specially modified to carry radio equipment for balloon recovery operations. The Holloman AFB Balloon Branch modified these vehicles in 1953, ruling out the possibility that the witness observed them in 1947, when such vehicles were not available to organizations performing balloon operations.<sup>156</sup> The other vehicle described and used by the Balloon Branch were "military ambulances." During the mid-1950s, the Balloon Branch modified three M-43 3/4-ton ambulances for use as balloon recovery and communications vehicles.<sup>158</sup> These vehicles were used for anthropomorphic dummy launch and recovery missions to relay messages to circling recovery aircraft and the balloon operations center at Holloman AFB.<sup>159</sup> The witness also described "a trailer with a motor on it, like a generator." This is a likely description of a 1 1/2-ton cargo trailer with an MB-19 15 Kilowatt diesel generator. These generators were used primarily on balloon launch sites during the 1950s and 1960s (see fig. 71).

**Balloon Branch Procedures.** Descriptions of military personnel "stretching stuff out on the ground, dragging stuff out of trucks" is a likely description of a balloon launch procedure that required the fragile

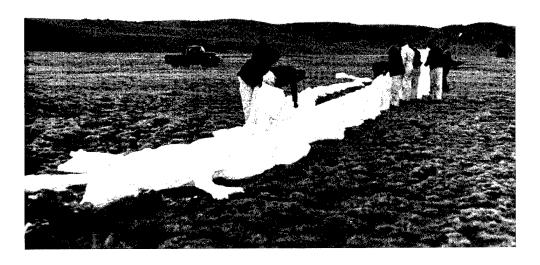
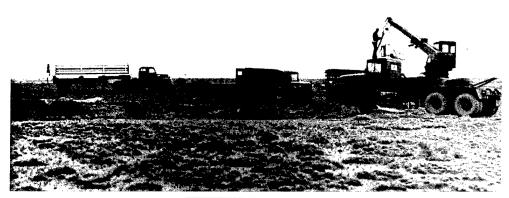
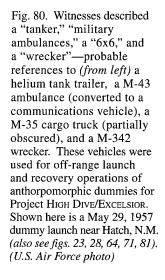


Fig. 79. "Stretching stuff out on the ground, dragging stuff out of trucks"—a likely witness reference to high altitude balloon inflation procedure that required the balloon to be stretched out on a protective ground cloth prior to inflation. (U.S. Air Force photo)

polyethylene balloon and its protective ground cloth to be removed from a launch vehicle and laid out on the ground prior to inflation. Another procedure described by the witness was an apparent reference to a balloon recovery practice of recording the names of civilians who observed high altitude balloon recoveries. The witness stated that military personnel "took everybody's name and everything," which was a procedure to ensure payment of a \$25 dollar reward to persons who assisted in the recovery. This procedure was also necessary to settle future claims of property damage caused by the balloon, payload, or recovery vehicles. 164





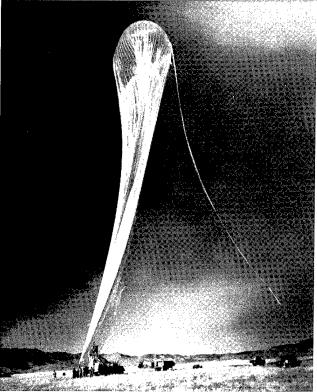


Fig. 81. Scene typical of a mid- to late 1950s off-range high altitude balloon launch. (U.S. Air Force photo)

# Summary

When the claims offered by UFO theorists to prove that an extraterrestrial spaceship and crew crashed and were recovered by the U.S. Air Force are compared to documented Air Force activities, it is reasonable to conclude, with a high degree of certainty, that the two "crashes" were actually descriptions of a launch or recovery of a high altitude balloon and anthropomorphic dummies. This conclusion was based on the remarkable similarities and independent corroboration between the witnesses who described *both* of the "crash sites." Statements such as "they was using dummies in those damned things" and a characterization of the crashed vehicle as, "I thought it was a blimp" are two of the many similarities. The extensive detailed descriptions provided by the witnesses, too numerous to be coincidental, were of the equipment, vehicles, procedures, and personnel of the Air Force research organizations who conducted the scientific experiments High Dive and Excelsion.

Though it is clear anthropomorphic dummies were responsible for these accounts, the specific locations of the events described was difficult, if not impossible, to determine since the witnesses were not specific. A witness to the "crash site" north of Roswell, Mr. James Ragsdale, was not certain of the actual location as evidenced by a change in his sworn testimony that moved the site many miles from its original location. 165

However, since Ragsdale reportedly lived or worked in the Roswell, Artesia, and Carlsbad, N.M. areas during the period when the dummies were used, it is likely he described one or more of the nine documented dummy recoveries in areas near there.

Reports of the other crash site, allegedly 175 miles northwest of Roswell on the San Agustin Plains, is likely based on descriptions of more than one launch and recovery of anthropomorphic dummies. Since one witness, Gerald Anderson, described procedures consistent with the launch *and* recovery of high altitude balloons, it is likely that he witnessed both of these activities, with at least one that included an anthropomorphic dummy payload.

The two secondhand witnesses to this "crash," Vern Maltais and Alice Knight, could have related descriptions from any of the dummy launch or landing sites. However, Maltais and Knight repeatedly described the impact location of the flying saucer as on the San Agustin Plains. One possible explanation is that the witnesses, in the 30 or more years since they were told the story by the original eyewitness, Mr. Barney Barnett, a soil conservation engineer who reportedly traveled extensively throughout New Mexico, may have confused San Agustin Plains with San Agustin Pass or San Agustin Peak, an area in the San Agustin Mountains of New Mexico. These areas are just outside the boundary of the White Sands Missile Range and the adjacent Jornada Test Range. Numerous anthropomorphic dummy balloon flights terminated and were recovered in this area. Furthermore, if the civilians witnessed dummy landings on either the White Sands Missile Range or the Jornada Test Range, both test areas and restricted U.S.

Government reservations, then this explains why they may have been told to leave the landing site. In the popular Roswell scenarios, witnesses were allegedly instructed by military personnel to leave the area because they witnessed something of a highly classified nature. This would be unlikely since the witnesses described projects that utilized anthropomorphic dummies which were unclassified. It is likely, however, that if the witnesses ventured onto one of these ranges they were instructed to leave, not because of classified activities, but for their own safety.

These conclusions are supported by official files, technical reports, extensive photographic documentation, and the recollections of numerous former and retired Air Force members and civilian employees who conducted Projects High Dive and Excelsion. The descriptions examined here, provided by UFO theorists themselves, were so remarkably—and redundantly—similar to these Air Force projects that the only reasonable conclusion can be that the witnesses described these activities. These many similarities are summarized in Table 1.1.

The next section will examine the accounts of "aliens" at the hospital at Roswell Army Air Field. As previously stated, due to the lack of general or detailed similarities with testimony of the two rural "crash sites," the hospital account was determined not to be associated with these reports.



Fig. 82.

Table 1.1
Comparison of Testimony to Actual Air Force Equipment, Vehicles, and Procedures Used to Launch and Recover Anthropomorphic Dummies

#### Notes:

"Crash Site" 1 - Site North of Roswell

"Crash Site" 2 - Site 175 miles Northwest of Roswell

Shaded areas indicates corroboration between witnesses.

Boxed shaded areas indicates corroboration between witnesses at different "crash" sites.

Witness Description	Air Force Equipment/Procedure	"Crash Site"
The "Aliens"		
1. "They was using dummies in those damned things." Ragsdale	Reference to anthropomorphic dummies (figs. 11, 14, 21-22, 29, 30-33, 35, 40, 72-75, 45).	Site 1
2. "I thought they were plastic dolls" Anderson	Reference to anthropomorphic dummies that had plastic skin.	Site 2
3. "an experimental plane with dummies in it" Kaufman	Reference to anthropomorphic dummies.	Site 1
4. "I'm sure that was bodies either bodies or dummies." Ragsdale	Reference to anthropomorphic dummies.	Site 1
5. "it was either dummies or bodies or something laying there." <sup>170</sup> Ragsdale	Reference to anthropomorphic dummies.	Site 1
6. "his eyes was open, staring blankly" <sup>171</sup> Anderson	Reference to anthropomorphic dummy.	Site 2
7. "not exactly like human beingssimilar, but not exactly." <sup>172</sup> Maltais	Reference to anthropomorphic dummies.	Site 2
8. "didn't look like human beings" <sup>173</sup> Knight	Reference to anthropomorphic dummies.	Site 2
9. "they didn't have a little finger" <sup>174</sup> Anderson	Reference to Alderson Laboratories dummy that were reused many timesand were often damaged but remained in service. (figs. 35, 73, 75).	Site 2

Witness Description	Air Force Equipment/Procedure	"Crash Site"
10. "they had four fingers" Maltais	Corroboration of description # 8. See above.	Site 2
11. [the beings were] "three and a half to four feet tall" Maltais	Likely description of anthropomorphic dummy missing legs after fall from altitude.	Site 2
12. [the being were] "four foot tall, four and a half feet tall." 177  Anderson	Corroboration of description #11. See above.	Site 2
13. "they weren't over four or five foot long at the most." <sup>178</sup> Ragsdale	Corroboration of description #11. See above.	Site 1
14. "Their skin coloration [was] a bluish tinted milky white"  **Theorem	Probable description of a "Sierra Sam" dummy with pale white "skin" (fig. 21).	Site 2
15. "their heads were hairlessno eyebrows, no eyelashes, no hair" 180  Maltais	Anthropomorphic dummies did not have "hair" (figs. 21, 22, 36-38, 40).	Site 2
16. "no haircompletely bald" 181  Anderson	Corroboration of description # 15. See above.	Site 2
17. "no visible ears just a rise there and then a hole" Anderson	Dummies had ears that were molded to their heads with openings for placement of instruments (fig. 22).	Site 2
18. "The hands were not covered" 183  Maltais	Reference to Alderson dummy which did not have gloves on hands (figs. 35, 73-75).	Site 2
19. "they were all wearing one piece suitsa shiny silverish gray color" Anderson	Reference to gray flight suits worn by the dummies for some of the tests (figs. 14, 29, 30).	Site 2
20. "Their clothing seemed to be one piece and gray in color." Maltais	Corroboration of description #19. See above.	Site 2

Witness Description	Air Force Equipment/Procedure	"Crash Site"
21. "It's uniform was torn in a couple spotstheir uniforms were in pretty sad shape."   **Anderson**  Anderson**	Dummy uniforms were often secondhand, rips and other defects were common but they remained in service (fig. 75).	Site 2
22. "Around the collar it [the suit] was trimmed inmaroon-like cording" Anderson	Reference to red duct tape used to prevent air from filling the dummy's flightsuit (figs. 29, 30).	Site 2
23. "They looked like they had some sort of bandages on 'emover his [the crewmember's] arm." Anderson	Reference to tape and nylon webbing used to prevent arms and legs of dummy from flailing. Tape was also used to secure the removable back plate of head (figs. 29, 30, 35, 72-75).	Site 2
24. [bandages] "around his midsection and partially over his shoulder" *** Andersor**	Reference to parachute harness that had chest and shoulder straps.	Site 2
The "Craft"	•	
25. "It [the crewmember] felt dead when I touched it, it was very cold." Anderson	Description of a high altitude balloon payload that was cold soaked at sub zero temperatures of the upper atmosphere.	Site 2
26. "it was a dirigible, a blimp that had crashed" Anderson	Reference to a partially inflated or deflated high altitude balloon (figs. 23, 70).	Site 2
27. "a flying saucer that had burst open" <sup>192</sup> Maltais	Reference to the dummy suspension rack that did not have sides (figs. 35, 73-75).	Site 2
28. "clusters of thread like material in the form of a cable" <sup>193</sup> Anderson	Numerous cables and wires were used in the dummy instrumentation kits and balloon control package.	Site 2
29. "others of those [cables] went from one kind of package of components to another kind of package" Anderson	Both balloon control package and dummy instrumentation kits were connected by cables (fig. 73).	Site 2
30. "some kind of container, a metal box" Anderson	Reference to balloon control package or dummy instrumentation kit (fig. 73).	Site 2

Witness Description	Air Force Equipment/Procedure	"Crash Site'
31. "it was ice cold, it felt like it just came out of a freezer" Anderson	Condition of a balloon payload after it has been "cold soaked" in the upper atmosphere at temperatures far below zero.	Site 2
Vehicles		
32. a "jeeplike truck that had a bunch of radios in it and two big antennasThere was a guy sittin' in there wearin' earphones and he was talking on the radio." 197  Anderson	Reference to a modified M-37 3/4-ton utility truck, commonly referred to as a weapons carrier, unique to the Balloon Branch. One of the primary vehicles used by recovery crews. Balloons were tracked by direction finding gear and required a radio operator to wear headphones (fig. 32).	Site 2
33. "weapons carriers" <sup>198</sup> Ragsdale	Corroboration of description #32. See above.	Site 1
34. "six by six Army trucks" Ragsdale	Reference to M-35 21/2-ton cargo truck used to transport dummies and suspension racks for launch and recoveries (fig. 31).	Site 1
35. "six by [six] military truck with canvaswagon typething over it"200	Corroboration of description #34. See above.	Site 2
Anderson	ı	
36. "wreckers [with] cranes on 'em" <sup>201</sup> Anderson	reference to M-246 wrecker used to launch and recover anthropomorphic dummy payloads (figs. 23, 28, 70).	Site 2
37. "a wrecker" <sup>202</sup> Ragsdale	Corroboration of description # 36. See above.	Site 1
38. "there was military ambulances" Anderson	Reference to a converted M-43 ambulances used as balloon recovery communications vehicles (figs. 64, 71, 80).	Site 2
39. "the pick-up" <sup>204</sup> Anderson	Pick-up trucks were often used to recover anthropomorphic dummies (figs. 71, 79).	Site 2

Witness Description	Air Force Equipment/Procedure	"Crash Site
40. "tankers, like, maybe had fuel or water in 'em" <sup>205</sup> Anderson	reference to M-49 fuel trucks used to refuel aircraft or helium trailer used to inflate balloon (figs. 23, 70, 80, 81).	Site 2
41. "a military car" <sup>206</sup> Anderson	A variety of military and civilian cars were often used for balloon recoveries and launches (Fig. 71).	Site 2
42. "'47 Ford car" <sup>207</sup> Ragsdale	Corroboration of description #41. See above.	Site 1
43. "there was a jeep that was pulling a trailer with a motor on it, like a generator." Anderson	Reference to 1-ton trailer and MB-19 15 Kilowatt diesel generator that were used at balloon launch and recovery locations (fig. 71).	Site 2
Aircraft	1000000 (1161 / 27)	
44. "observation aircraft…high winged aircraft" <sup>209</sup> Anderson	Reference to an L-20 aircraft, primary "chase" aircraft used for balloon recovery in the mid 1950s (fig. 77).	Site 2
45. "C-47 sittin there"[on the road] <sup>210</sup> Anderson  Procedures	C-47 aircraft were often used on dummy launch and recovery operations (fig. 78).	Site 2
46. "The federal government could have been doing something because they didn't want anyone to know what this wasthey was using dummies in those damned thingsthey could use remote control"211 Ragsdale	Reference to balloon borne anthropomorphic dummies that were dropped by remote control by balloon controllers at Holloman AFB	Site 1
47. "they took everybody's name and everything" <sup>212</sup> Anderson	Procedure used by balloon Branch to ensure payment of \$25 reward and to settle claims of property damage.	Site 2
48. "they cleaned everything all upI mean they cleaned everything" Ragsdale	Balloon Branch personnel were required to remove as much debris as possible from balloon and payload landing areas to avoid complaints and legal actions.	Site 1

Witness Description	Air Force Equipment/Procedure	"Crash Site"
49. "they had the road barricaded off" 214  Anderson	Procedure used for aircraft operations.	Site 2
50. "they had the road sealed off" Ragsdale	Corroboration of description #49. See above.	Site 1
51. "airplanes sitting there they had landed on the highway" <sup>216</sup> Anderson	Established procedure to refuel an aircraft, launch a balloon from an isolated location or recover a small payload near a rural road.	Site 2
52. "there was airplanes in the sky" [over the crash site]. <sup>217</sup> Anderson	Reference to balloon "chase" aircraft used to direct ground recovery crews to balloon impact site.	Site 2
53. "stretching out cables of some kindthey were stretching stuff out on the ground, dragging stuff out of trucks" 218  Anderson	Reference to balloon inflation procedure that required the balloon and ground cloth to be removed from a vehicle and laid on the ground (fig. 79).	Site 2